

## **USEPA Region 5-Illinois EPA Monthly Air Permits Call**

DATE: March 4, 2009  
SUBJECT: Air Permits Conference Call of February 17, 2009  
FROM: Constantine Blathras, Environmental Engineer  
ARD/APB/Air Permits Section  
TO: Files  
THRU: Pamela Blakley, Section Chief

**Next month call: 10:00 AM, March 31, 2009**  
**Call-in number: 217-782-0709**

The following are notes from the subject conference call. Representing USEPA was Constantine Blathras, Genevieve Damico, and Rachel Rineheart. Representing Illinois EPA were Jason Schnepf, Kevin Hecht, Minesh Patel, Manish Patel, Kevin Smith, Bob Smet, Shashi Shah, Chris Romaine and Ed Bakowski. These conference calls/meetings are for gathering permitting information, identifying issues of potential concern and initiating discussion for timely resolution of issues. USEPA comments made during these calls are tentative and subject to modification upon further review of factual data. IEPA has updated the RBLC to add information on recently issued permits. IEPA will also inform EPA when the permit application is ready for consultation under the Endangered Species Act (ESA).

### **KEVIN SMITH**

**ISG/Mittal Steel (Riverdale, Cook Co.); ESA-no:** This company proposes to construct two new electric arc furnaces (EAF) to replace the basic oxygen furnaces at its existing steel making plant. The project will be a major PSD/NSR project for VOC, NOx, and PM. No change in status, reviewing modeling. Sent letter for modeling concerns, have not yet received a response. No change.

**Afton Chemical (formerly Ethyl Petroleum), (Sauget, St. Clair Co.); ESA-no:** This company proposes to revise its permit for its transmission oil additive process for BACT for the condenser. The condenser removes H<sub>2</sub>S and CS<sub>2</sub> gases at -35-40°F before passing to a flare. The permit requires operation of the condenser properly to assure vapor liquid separation, compliance would be done by a mass balance and presume the emissions are

sent to the flare. IEPA met with company to get additional information for application. No change.

## **BOB SMET**

**Power Holdings Corp., (Ashley, Jefferson Co.); ESA-yes:** This project is for a coal to substitute natural gas SNG plant. IEPA is working on the air quality analysis. Company has submitted a revised application. The company selected a new site and submitted a new application. The draft permit is now out to public notice. A hearing has been scheduled for March 3.

**Rentech (East Dubuque, Jo Davies Co.); ESA- no netting:** This company is proposing to remove 3 gas fired engines. They will replace them with a gasification unit to produce ammonia for its ammonia nitrate fertilizer manufacturing operation. The permit is in the public comment period. Citizens have raised comments on CO2 emissions. This permit is not moving quickly. Although Rentech still wants the permit, IEPA understands that this facility may be moving to Mississippi. No change, may soon withdraw application.

**Wheatland Tube, (Chicago, Cook Co.); ESA-no NSR:** This company is revising its LAER permit, and will install a new mill which is projected to avoid NSR review (the NAA ozone threshold for Chicago is 25 tpy). No change in status. There may be a second mill application coming in. IEPA will probably wait to process both permits at once. On hold.

**Diversified CPC International (Will Co.); ESA-no:** PSD app in house. Clean-up permit. Source blends propellants. BACT/LAER enf by Illinois EPA. Some VOM to flare, some uncontrolled and mixed with fluorocarbons. Drafted, but not yet to public notice. The company is proposing revisions to the draft permit. No change in status.

**MGP Ingredients (what used to be Midwest Grain Products) (Pekin, Tazewell Co.); ESA-yes:** has come in with a permit application for a 525 mmBtu/hr coal-fired boiler for their plant in Pekin. It will trigger PSD for SO2, NOx, and other pollutants. Although the SO2 emissions were modeled at a non-significant impact level of 4.89 micrograms per cubic meter, this is too close to 5 in an area that has recently experience an SO2 exceedance. Public comment period closed, finalizing response to comments.

**Raven Energy (Johnston City, Williamson Co.); ESA-no synthetic minor:** This company is proposing an SNG plant. The site will

process 2.5 million tons of coal for gasification. The proposed project is expected to be minor. The proposed company is to be located next to Williamson Energy. Williamson Energy operates a coal prep plant and Raven will accept 1/3 of Williamson's output. Raven Energy and Williamson are owned by the same company. No change. The company may submit a new application.

**Bio Pro Biomass Energy (Rock Falls, Jo Davies Co.); ESA-not PSD:**

This company is proposing a 22 MW wood fired boiler. This boiler would also burn corn stover.

**Great Point Energy (Tuscola); ESA-no:** Proposing an SNG plant at the former Futuregen site. No application has been received yet.

**Chicago Cement (Lake Calumet, Cook Co.); ESA-no:** This company proposes to construct a cement kiln and associated equipment. The project will be major for NO<sub>x</sub>, SO<sub>2</sub>, and CO.

**Plains Marketing:** This company proposes to construct a crude oil storage tank farm, 40 additional tanks. IEPA is reviewing the project to see if it should be permitted together or separately as part of the existing tank farm.

**JASON SCHNEPP**

**US Steel; ESA-yes:** Clean up a PSD permit. Review of this application has not begun.

**Trinity Structural Towers, Inc. (Clinton, Dewitt Co.); ESA-no, synthetic minor:** Modification to existing source to install new coating lines. Source coats towers for wind turbines. Source has requested 237 tons VOM per year. Public Notice ends 2/26/2009.

**ExxonMobil Oil Corporation, (Joliet, Will Co.); ESA-no, synthetic minor:** USEPA's Mobile Source Air Toxics Phase II Rule (MSAT2) will require tighter corporate gasoline pool annual average benzene content beginning January 1, 2011. ExxonMobil would use "feed tailoring", that is remove benzene precursors from the feed to the Catalytic Reformer Unit. The "feed tailoring" would occur in a new dehexanizer, or fractionator. The new fractionator would require heat, supplied by steam from the refinery's existing steam system, to perform the separation process. Source has requested an increase of 37+ tons of NO<sub>x</sub> per year. Currently drafting the permit.

**Material Sciences Corporation, (Elk Grove Village, Cook Co.);**  
**ESA -no, NA NSR:** This is a revision of a previously issued NA NSR permit. The company would like to increase utilization of lines that currently are restricted due to installation of a Line 18, which required the NA NSR permit (internal offset issue). Review of this application has not begun.

**MINESH PATEL**

**Vulcan Materials, (Manteno, Kankakee Co.);** **ESA-yes:** This company had a PSD permit that is being revised to switch out a wet scrubber for a dry scrubber which had never been installed. The company had closed temporarily and is hoping to operate after installing a dry scrubber and adding a preheater kiln tower. IEPA is working on the air quality modeling analysis and has requested additional information. They expect it will be moving to public notice soon. There is currently an enforcement action pending. IEPA is reviewing the PM modeling and projected air concentrations. Draft permit soon to public notice.

**Marquis Energy (Hennepin, Putnum County):** This company has applied for revision to construction permit to increase design capacity from 110 mmgal/yr to 125 mmgal/yr. No construction is required as this increase is achieved through improved operating procedures for the plant as achieved at other similar plant. Public Hearing was held on July 22, 2008. Comment Period Ended August 21, 2008. Awaiting review of test results.

The IEPA has a summary list of fuel ethanol plant projects in Illinois available on its website:  
<http://www.epa.state.il.us/air/permits/ethanol-plants.html>. The information is based on the bureau of air's permit and application files.

**Aventine Renewable Energy for Pekin III Project (Pekin, Tazewell County):** Submitted an application for expansion of 108 million gallons per year dry mill ethanol plant. The proposed ethanol plant would be a stand alone facility (would not be utilizing any of the existing wet mill or dry mill operations). The proposed facility would be a major modification subject to PSD regulations. IEPA sent a lateness notice to the company.

**Mississippi Lime:** Will be submitting a PSD application for a lime kiln. Have received permit application.

**MANISH PATEL**

**ADM Peoria (Peoria); ESA-no:** Received application for 2 coal fired boilers. The project will be netting out of PSD review but the permit will have case-by-case MACT for HAPs. ADM is going to revisit the case-by-case MACT for the application, thus the application is put on hold as requested by ADM. No change.

**Corn Products ARGO, (Bedford Park, Cook Co.), ESA-no:** This company proposes to install a destarching unit and increase the existing equipment operating hours. The will be major for PM, PM10, and PM2.5.

## **KEVIN HECHT**

**Washington Mills (formerly Exelon), Hennepin; ESA-yes:** This company proposes a PSD project for silicon carbide manufacturing. Comment period closed.

## **SHASHI SHAH**

**Baldwin Expansion, LLC (Dynergy Midwest, formerly Illinois Power) (Baldwin, Randolph Co.); ESA-no:** \$1.5 billion, two 750 MW coal-fired boilers. 4 - 5 million tons of coal a year by rail/barge. Adding 1500 MW to current 2000 MW from 3 existing boilers at Baldwin Power Plant, approx. 50 miles southeast of St. Louis.

Two new boilers to fire pulverized coal, 750 MW nominal, each (total increase in plant capacity 1500 MW). Selective catalytic reduction (SCR), SO2 scrubbers, and electrostatic precipitators proposed, exhausted through single 590 foot stack (two separate flues).

16,500 tons of SO2, 7,450 tons NOx, 2,250 tons PM total (filterable and condensable), 330 tons VOM and 0.1 tons of mercury. These limits reflect proposed emission limits of 0.25. 0.12 and 0.034 lb/mmBtu for SO2, NOx and PM (total), respectively. After three years, proposed emissions for NOx would drop to 5,300 tons, based on compliance with NOx emission rate of 0.08 lb/mmBtu. Limits may be lowered due to IL EPA evaluation of BACT/LAER. The application does include an air quality analysis. NOx and CO impacts not significant. PM and SO2 modeling shows compliance with NAAQS with a fair margin of compliance.

Dynergy does plan to submit further modeling to address impacts on the nearby Mingo Wildlife refuge, a Class I Area under PSD. This modeling would show that even with the proposed expansion,

emissions of SO2 and NOx from Baldwin would be significantly lower than the plant's actual emissions in recent years, i.e., 1996 through 2000.

IL sent letter to source requesting further info. The company is doing modeling to address violations to NSR and a switch from IL coal to PRB coal. Send email to source about permit status, no response from company. No change.

**Teepak (Danville, Vermilion Co.); ESA-yes:** The company is proposing to replace 1 line for 3 existing lines. This project is now a PSD project and the company has submitted a new application. No change.